What is claimed is:

1. A fluorescent lamp comprising:

a hermetically sealed lamp vessel; and

a phosphor layer attached to a part of an inner surface of the lamp vessel,

wherein a thickness of the phosphor layer near an edge thereof gradually and smoothly decreases towards the edge.

2. The fluorescent lamp of Claim 1,

wherein the phosphor layer is formed so that a slope is created near the edge, the slope having an acute angle with respect to the part of the inner surface of the lamp vessel.

3. The fluorescent lamp of Claim 2, further comprising:

a discharge material that contains mercury, and is enclosed in the lamp vessel; and

a coil that is provided outside the lamp vessel, and generates a magnetic field so as to make the discharge material induce a plasma discharge,

wherein the plasma discharge causes the mercury to emit ultraviolet light, and the emitted ultraviolet light is converted into visible light by means of a phosphor material included in the phosphor layer.

4. The fluorescent lamp of Claim 3,

wherein the lamp vessel is made up of a glass bulb in a substantially spherical form, and an internal tube that is provided in the glass bulb and has a concave portion in a tube-like form,

wherein the phosphor layer is formed on an inner surface of the glass bulb.

5. The fluorescent lamp of Claim 4,

wherein the coil is provided in the concave portion.

6. The fluorescent lamp of Claim 5,

wherein the phosphor layer is obtained by drying a mixture of an aqueous solution of polyethylene oxide and phosphor powders.